[redacted]

09/626,127

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=> d his

     (FILE 'HOME' ENTERED AT 15:34:45 ON 09 SEP 2003)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:35:13 ON
     09 SEP 2003
L1             8 S MAMMALIAN LYSOSOMAL ENZYME
L2             4 DUP REM L1 (4 DUPLICATES REMOVED)
L3           136 S MAMMALIAN LYSOSOMAL?
L4            20 S L3 AND PLANT
L5            20 DUP REM L4 (0 DUPLICATES REMOVED)
L6            14 S L5 AND RECOMBINANT
L7             4 S L3 AND PLANT CELL
L8           195 S LYSOSOMAL ENZYME AND PLANT
L9           105 S L8 AND PROMOTER
L10           37 S L9 AND PLANT CELL
L11           37 S L10 AND CONSTRUCT
L12           15 S L11 AND REGULAT? EXPRESSION
L13           15 DUP REM L12 (0 DUPLICATES REMOVED)
L14           40 S PLANT CELL AND LYSOSOMAL ENZYME
L15           14 S L14 AND EXPRESSION CONSTRUCT
L16            3 S L15 NOT L13
L17            3 S L16 AND MAMMALIAN

=>
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FILE 'HOME' ENTERED AT 15:34:45 ON 09 SEP 2003

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.21 | 0.21

FILE 'BIOSIS' ENTERED AT 15:35:13 ON 09 SEP 2003
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FILE 'MEDLINE' ENTERED AT 15:35:13 ON 09 SEP 2003

FILE 'CAPLUS' ENTERED AT 15:35:13 ON 09 SEP 2003
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FILE 'USPATFULL' ENTERED AT 15:35:13 ON 09 SEP 2003
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*** YOU HAVE NEW MAIL ***

=> s mammalian lysosomal enzyme
L1 8 MAMMALIAN LYSOSOMAL ENZYME

=> d l1 bib abs 1-8

L1 ANSWER 1 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1990:425111 BIOSIS
DN BA90:85912
TI EXPRESSION OF HUMAN LYSOSOMAL BETA HEXOSAMINIDASE IN YEAST VACUOLES.
AU PRESANT T R
CS DEP. BIOLOGICAL CHEM., UCLA SCH. MED., LOS ANGELES, CALIF. 90024.
SO BIOCHEM BIOPHYS RES COMMUN, (1990) 170 (1), 383-390.
CODEN: BBRCA9. ISSN: 0006-291X.
FS BA; OLD
LA English
AB The yeast Saccharomyces cerevisiae was tested as a recipient for functional expression of a **mammalian lysosomal enzyme**. The .beta. chain of human .beta.-hexosaminidase formed active dimeric enzyme, HexB, in transformants. HexB activity was localized to the vacuole, the yeast counterpart tc the lysosome. A simple in situ enzyme assay was developed, which could be useful in expressing other lysosomal cDNAs.

L1 ANSWER 2 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1986:143911 BIOSIS
DN BA81:54327
TI PHOSPHORYLATION AND SULFATION OF ARYLSULFATASE A ACCOMPANIES BIOSYNTHESIS OF THE ENZYME IN NORMAL AND CARCINOMA CELL LINES.

LA English
AB Arylsulfatase A (arylsulfate sulfohydrolase, EC 3.1.6.1), a **mammalian lysosomal enzyme**, is initially

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synthesized as a 69, 67 and 64 kDa precursor polypeptide in a prostate carcinoma cell line PC-3SF12, in HeLa cells and in a normal human embryonic lung cell line WI-38, respectively. These precursor polypeptides are secreted into the medium or processed to mature enzymes of apparent molecular mass 66, 64 or 62 kDa in PC-3SF12, HeLa or WI-38 cells, respectively. The precursor and mature polypeptides in WI-38 cells are phosphorylated, and the phosphate is lost upon treatment with endo-.beta.-hexosaminidase H. Arysulfatase A is also shown to be sulfated in WI-38 cells. The presence of castanospermine, an inhibitor of sulfation of the second N-acetylglucosamine residue of the chitobiose core, does not reduce the extent of sulfation of arylsulfatase A, suggesting that either terminal sugars or the protein is sulfated. Sulfation may have a protective function similar to that of terminal sialic acid residues in glycoproteins. Although the subcellular location of arylsulfatase A is identical in PC-3SF12 and WI-38 cells, pulse-chase experiments indicate that arylsulfatase A protein has a slower turnover in the prostate carcinoma cell line than it does in the normal human lung cell line. The differences in the apparent molecular weights of arylsulfatase A in the normal and carcinoma cell lines are shown to be due to variations in the carbohydrate content of the enzyme. The apparent molecular mass of the polypeptide chain obtained after endo-.beta.-hexosaminidase H treatment is 59 kDa, a value which is identical for all three cell lines studied here. These results suggest the possibility of an enhanced activity of terminal glucosyltransferase enzymes in carcinoma cell lines and in tumor tissues. Arylsulfatase A may be a useful marker for studying transformation-related processes in human cell lines.

L1 ANSWER 3 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1984:202822 BIOSIS
DN BA77:35806
TI QUANTITATIVE MEASURES OF AGING IN THE NEMATODE CAENORHABDITIS-ELEGANS 2. LYSOSOMAL HYDROLASES AS MARKERS OF SENESCENCE.
AU BOLANOWSKI M A; JACOBSON L A; RUSSELL R L
CS DEP. PHYSIOLOGICAL CHEMSITRY, JOHNS HOPKINS UNIV., SCH. MED., 725 N. WOLFE ST., BATLIMORE, MD. 21205, USA.
SO MECH AGEING DEV, (1983) 21 (3-4), 295-320.
CODEN: MAGDA3. ISSN: 0047-6374.
FS BA; OLD
LA English
AB To provide additional quantitative markers of senescence in the nematode C. elegans, age-dependent increases were identified in 4 lysosomal enzymes: acid phosphatase, .beta.-N-acetyl-D-glucosaminidase, .beta.-D-glucosaminidase, .beta.-D-glucosidase and .alpha.-D-mannosidase. These enzymes were judged to be lysosomal on the basis of their resemblance to analogous mammalian lysosomal enzymes with regard to subcellular fractionation, lectin binding, Km, MW, inhibitor sensitivities and pH optima. In nematode populations which had a median lifespan of 8.9 .+-. 0.7 days and a maximum lifespan of 14-16 days, the following increases in acid hydrolase activities were observed per animal from day 3 (early adulthood) to day 10: up to 2.5-fold for acid phosphatase; 8-fold for .beta.-N-acetyl-D-glucosaminidase; 9-fold for .beta.-D-glucosidase; and 4-fold for .alpha.-D-mannosidase. Three forms of acid phosphatase and 2 forms of .beta.-D-glucosidase were separated by ion-exchange chromatography, but in each case only 1 form of the enzyme was primarily responsible for the age-dependent increase in total activity; acid phosphatase, .beta.-N-acetyl-D-glucosaminidase .beta.-D-glucosidase and .alpha.-D-mannosidase activities are sufficiently large and reproducible to be useful quantitative markers of senescence in C. elegans.

09567863

L1 ANSWER 4 OF 8 MEDLINE on STN
AN 90321255 MEDLINE
DN 90321255 PubMed ID: 2142595
TI Expression of human lysosomal beta-hexosaminidase in yeast vacuoles.
AU Prezant T R
CS Department of Biological Chemistry, UCLA School of Medicine 90024.
NC DK07914 (NIDDK)
DK38857 (NIDDK)
NS22376 (NINDS)
SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1990 Jul 16) 170 (1) 383-90.
Journal code: 0372516. ISSN: 0006-291X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199008
ED Entered STN: 19900921
Last Updated on STN: 19900921
Entered Medline: 19900821
AB The yeast Saccharomyces cerevisiae was tested as a recipient for functional expression of a **mammalian lysosomal enzyme**. The beta chain of human beta-hexosaminidase formed active dimeric enzyme, HexB, in transformants. HexB activity was localized to the vacuole, the yeast counterpart to the lysosome. A simple in situ enzyme assay was developed, which could be useful in expressing other lysosomal cDNAs.

L1 ANSWER 5 OF 8 MEDLINE on STN
AN 86026427 MEDLINE
DN 86026427 PubMed ID: 2864959
TI Phosphorylation and sulfation of arylsulfatase A accompanies biosynthesis of the enzyme in normal and carcinoma cell lines.
AU Waheed A; van Etten R L
NC GM 22933 (NIGMS)
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1985 Oct 30) 847 (1) 53-61.
Journal code: 0217513. ISSN: 0006-3002.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198512
ED Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19851202
AB Arylsulfatase A (arylsulfate sulfohydrolase, EC 3.1.6.1), a **mammalian lysosomal enzyme**, is initially synthesized as a 69, 67 and 64 kDa precursor polypeptide in a prostate carcinoma cell line PC-3SF12, in HeLa cells and in a normal human embryonic lung cell line WI-38, respectively. These precursor polypeptides are secreted into the medium or processed to mature enzymes of apparent molecular mass 66, 64 or 62 kDa in PC-3SF12, HeLa or WI-38 cells, respectively. The precursor and mature polypeptides in WI-38 cells are phosphorylated, and the phosphate is lost upon treatment with

suggesting that either terminal sugars [illegible] sulfated. Sulfation may have a protective function similar to that of terminal sialic acid residues in glycoproteins. Although the subcellular location

of arylsulfatase A is identical in PC-3SF12 and in WI-38 cells, pulse-chase experiments indicate that arylsulfatase A protein has a slower turnover in the prostate carcinoma cell line than it does in the normal human lung cell line. The differences in the apparent molecular weights of arylsulfatase A in the normal and carcinoma cell lines are shown to be due to variations in the carbohydrate content of the enzyme. The apparent molecular mass of the polypeptide chain obtained after endo-beta-hexosaminidase H treatment is 59 kDa, a value which is identical for all three cell lines studied here. These results suggest the possibility of an enhanced activity of terminal glucosyltransferase enzymes in carcinoma cell lines and in tumor tissues. Arylsulfatase A may be a useful marker for studying transformation-related processes in human cell lines.

L1 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:527612 CAPLUS
DN 113:127612
TI Expression of human lysosomal .beta.-hexosaminidase in yeast vacuoles
AU Prezant, Toni R.
CS Sch. Med., UCLA, Los Angeles, CA, 90024, USA
SO Biochemical and Biophysical Research Communications (1990), 170(1), 383-90
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB The yeast Saccharomyces cerevisiae was tested as a recipient for functional expression of a **mammalian lysosomal enzyme**. The .beta.-chain of human .beta.-hexosaminidase formed an active dimeric enzyme, HexB, in transformants. HexB activity was localized to the vacuole, the yeast counterpart to the lysosome. A simple in situ enzyme was developed that could be useful in expressing other lysosomal cDNAs.

L1 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:438109 CAPLUS
DN 113:38109
TI A genetic analysis of lysosomal enzyme activities in Brahman cattle
AU McPhee, C. P.; Reichmann, K. G.
CS Dep. Primary Ind., Anim. Res. Inst., Yeerongpilly, 4105, Australia
SO Australian Journal of Agricultural Research (1990), 41(1), 205-11
CODEN: AJAEA9; ISSN: 0004-9409
DT Journal
LA English
AB Analyses of variance and covariance were carried out on the activities of 3 lysosomal enzymes in mononuclear blood cells from Brahman cattle. These were hexosaminidase (HEX), .beta.-D-galactosidase (GAL), and acid .alpha.-glucosidase (GLU) which had been measured in blood mononuclear cells from 1752 cattle from 6 herds in a Pompe's disease control program. Herd of origin and date of bleeding significantly affected the level of activity of all enzymes. In addn., HEX and GAL were affected by age and HEX by the sex of the animal bled. Ests. of heritability from sire variances were 0.29 for HEX, 0.31 for GAL, and 0.44 for GLU. Genetic correlations between all enzymes were pos. The data indicate the existence of a major gene causing Pompe's disease and responsible for 16% of the genetic variation in GLU. One std. deviation of selection differential for high GLU should almost eliminate Pompe's disease from the

L1 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1985:612553 CAPLUS
DN 103:212553

09567863

TI Phosphorylation and sulfation of arylsulfatase A accompanies biosynthesis of the enzyme in normal and carcinoma cell lines
AU Waheed, Abdul; Van Etten, Robert L.
CS Dep. Chem., Purdue Univ., West Lafayette, IN, 47907, USA
SO Biochimica et Biophysica Acta (1985), 847(1), 53-61
CODEN: BBACAQ; ISSN: 0006-3002
DT Journal
LA English
AB Arylsulfatase A (arylsulfate sulfohydrolase, EC 3.1.6.1), a **mammalian lysosomal enzyme**, is initially synthesized as a 69, 67 and 64 kilodalton (kDa) precursor polypeptide in a prostate carcinoma cell line PC-3SF12, in HeLa cells, and in a normal human embryonic lung cell line WI-38, resp. The precursor and mature polypeptides in WI-38 cells are phosphorylated, and the phosphate is lost upon treatment with endo-.beta.-hexosaminidase H. Arylsulfatase A is also sulfated in WI-38 cells. The presence of castanospermine, an inhibitor of sulfation of the second N-acetylglucosamine residue of the chitobiose core, does not reduce the extent of sulfation of arylsulfatase A, suggesting that either terminal sugars or the protein is sulfated. Sulfation may have a protective function similar to that of terminal sialic acid residues in glycoproteins. Although the subcellular location of arylsulfatase A is identical in PC-3SF12 and in WI-38 cells, pulse-chase expts. indicate that arylsulfatase A protein has a slower turnover in the prostate carcinoma cell line than it does in the normal human lung cell line. The differences in the apparent mol. wts. of arylsulfatase A in the normal and carcinoma cell lines are shown to be due to variations in the carbohydrate content of the enzyme. The apparent mol. mass of the polypeptide chain obtained after endo-.beta.-hexosaminidase H treatment is 59 kDa, a value which is identical for all 3 cell lines studied here. These results suggest the possibility of an enhanced activity of terminal glucosyltransferase enzymes in carcinoma cell lines and in tumor tissues. Arylsufatase A may be a useful marker for studying transformation-related processes in human cell lines.

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=> du rem l1
DU IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2             4 DUP REM L1 (4 DUPLICATES REMOVED)

=> d l2 bib abs 1-4

L2   ANSWER 1 OF 4  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
     DUPLICATE 1
AN   1990:425111  BIOSIS
DN   BA90:85912
TI   EXPRESSION OF HUMAN LYSOSOMAL BETA HEXOSAMINIDASE IN YEAST VACUOLES.
AU   PRESANT T R
CS   DEP. BIOLOGICAL CHEM., UCLA SCH. MED., LOS ANGELES, CALIF. 90024.
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functional expression of a **mammalian lysosomal enzyme**. The .beta. chain of human .beta. hexosaminidase formed active dimeric enzyme, HexB, in transformants. HexB activity was localized

to the vacuole, the yeast counterpart to the lysosome. A simple in situ enzyme assay was developed, which could be useful in expressing other lysosomal cDNAs.

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:438109 CAPLUS
DN 113:38109
TI A genetic analysis of lysosomal enzyme activities in Brahman cattle
AU McPhee, C. P.; Reichmann, K. G.
CS Dep. Primary Ind., Anim. Res. Inst., Yeerongpilly, 4105, Australia
SO Australian Journal of Agricultural Research (1990), 41(1), 205-11
CODEN: AJAEA9; ISSN: 0004-9409
DT Journal
LA English
AB Analyses of variance and covariance were carried out on the activities of 3 lysosomal enzymes in mononuclear blood cells from Brahman cattle. These were hexosaminidase (HEX), .beta.-D-galactosidase (GAL), and acid .alpha.-glucosidase (GLU) which had been measured in blood mononuclear cells from 1752 cattle from 6 herds in a Pompe's disease control program. Herd of origin and date of bleeding significantly affected the level of activity of all enzymes. In addn., HEX and GAL were affected by age and HEX by the sex of the animal bled. Ests. of heritability from sire variances were 0.29 for HEX, 0.31 for GAL, and 0.44 for GLU. Genetic correlations between all enzymes were pos. The data indicate the existence of a major gene causing Pompe's disease and responsible for 16% of the genetic variation in GLU. One std. deviation of selection differential for high GLU should almost eliminate Pompe's disease from the population. The efficiency of selection would be aided by estg. the breeding value for GLU using measurements of HEX and GLU and taking account of an animal's sex, age, date of bleeding, and herd of origin.

L2 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 1986:143911 BIOSIS
DN BA81:54327
TI PHOSPHORYLATION AND SULFATION OF ARYLSULFATASE A ACCOMPANIES BIOSYNTHESIS OF THE ENZYME IN NORMAL AND CARCINOMA CELL LINES.
AU WAHEED A; VAN ETTEN R L
CS DEP. CHEM., PURDUE UNIV., WEST LAFAYETTE, IN 47907, USA.
SO BIOCHIM BIOPHYS ACTA, (1985) 847 (1), 53-61.
CODEN: BBACAQ. ISSN: 0006-3002.
FS BA; OLD
LA English
AB Arylsulfatase A (arylsulfate sulfohydrolase, EC 3.1.6.1), a **mammalian lysosomal enzyme**, is initially synthesized as a 69, 67 and 64 kDa precursor polypeptide in a prostate carcinoma cell line PC-3SF12, in HeLa cells and in a normal human embryonic lung cell line WI-38, respectively. These precursor polypeptides are secreted into the medium or processed to mature enzymes of apparent molecular mass 66, 64 or 62 kDa in PC-3SF12, HeLa or WI-38 cells, respectively. The precursor and mature polypeptides in WI-38 cells are phosphorylated, and the phosphate is lost upon treatment with endo-.beta.-hexosaminidase H. Arysulfatase A is also shown to be sulfated in WI-38 cells. The presence of castanospermine, an inhibitor of sulfation [illegible] N-triglucosamine residue of the chitobiose core does not affect the identical in PC-3SF12 and WI-38 cells, pulse chase experiments indicate that arylsulfatase A protein has a slower turnover in the prostate carcinoma cell line than it does in the normal human lung cell line. The

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differences in the apparent molecular weights of arylsulfatase A in the normal and carcinoma cell lines are shown to be due to variations in the carbohydrate content of the enzyme. The apparent molecular mass of the polypeptide chain obtained after endo-.beta.-hexosaminidase H treatment is 59 kDa, a value which is identical for all three cell lines studied here. These results suggest the possibility of an enhanced activity of terminal glucosyltransferase enzymes in carcinoma cell lines and in tumor tissues. Arylsulfatase A may be a useful marker for studying transformation-related processes in human cell lines.

L2 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1984:202822 BIOSIS
DN BA77:35806
TI QUANTITATIVE MEASURES OF AGING IN THE NEMATODE CAENORHABDITIS-ELEGANS 2. LYSOSOMAL HYDROLASES AS MARKERS OF SENESCENCE.
AU BOLANOWSKI M A; JACOBSON L A; RUSSELL R L
CS DEP. PHYSIOLOGICAL CHEMSITRY, JOHNS HOPKINS UNIV., SCH. MED., 725 N. WOLFE ST., BATLIMORE, MD. 21205, USA.
SO MECH AGEING DEV, (1983) 21 (3-4), 295-320.
CODEN: MAGDA3. ISSN: 0047-6374.
FS BA; OLD
LA English
AB To provide additional quantitative markers of senescence in the nematode C. elegans, age-dependent increases were identified in 4 lysosomal enzymes: acid phosphatase, .beta.-N-acetyl-D-glucosaminidase, .beta.-D-glucosaminidase, .beta.-D-glucosidase and .alpha.-D-mannosidase. These enzymes were judged to be lysosomal on the basis of their resemblance to analogous mammalian lysosomal enzymes with regard to subcellular fractionation, lectin binding, Km, MW, inhibitor sensitivities and pH optima. In nematode populations which had a median lifespan of 8.9 .+-. 0.7 days and a maximum lifespan of 14-16 days, the following increases in acid hydrolase activities were observed per animal from day 3 (early adulthood) to day 10: up to 2.5-fold for acid phosphatase; 8-fold for .beta.-N-acetyl-D-glucosaminidase; 9-fold for .beta.-D-glucosidase; and 4-fold for .alpha.-D-mannosidase. Three forms of acid phosphatase and 2 forms of .beta.-D-glucosidase were separated by ion-exchange chromatography, but in each case only 1 form of the enzyme was primarily responsible for the age-dependent increase in total activity: acid phosphatase I increased 18-fold and .beta.-D-glucosidase I increased 100-fold. There were only slight age-dependent changes in choline acetyltransferase, acetylcholinesterase or .alpha.-D-glucosidase activities after early adulthood. The age-dependent increases in acid phosphatase, .beta.-N-acetyl-D-glucosaminidase .beta.-D-glucosidase and .alpha.-D-mannosidase activities are sufficiently large and reproducible to be useful quantitative markers of senescence in C. elegans.

=> d his

(FILE 'HOME' ENTERED AT 15:34:45 ON 09 SEP 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:35:13 ON 09 SEP 2003
L1 8 S MAMMALIAN LYSOSOMAL ENZYME
[illegible]

[illegible]
L4 20 L3 AND PLANT

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=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 20 DUP REM L4 (0 DUPLICATES REMOVED)

=> s l5 and recombinant
L6 14 L5 AND RECOMBINANT

=> d l6 bib abs 1-14

L6 ANSWER 1 OF 14 USPATFULL on STN
AN 2003:238122 USPATFULL
TI Minicell-based transfection
IN Sabbadini, Roger A., Lakeside, CA, UNITED STATES
Berkley, Neil, San Diego, CA, UNITED STATES
PI US 2003166279 A1 20030904
AI US 2002-157391 A1 20020528 (10)
RLI Division of Ser. No. US 2002-154951, filed on 24 May 2002, PENDING
PRAI US 2002-359843P 20020225 (60)
US 2001-293566P 20010524 (60)
DT Utility
FS APPLICATION
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 18548
AB The invention provides compositions and methods for the production of achromosomal and anucleate cells useful for applications such as diagnositic and therapeutic uses, as well as research tools and agents for drug discovery.

L6 ANSWER 2 OF 14 USPATFULL on STN
AN 2003:237942 USPATFULL
TI Minicells comprising membrane proteins
IN Sabbadini, Roger A., Lakeside, CA, UNITED STATES
Surber, Mark W., Coronado, CA, UNITED STATES
Berkley, Neil, San Diego, CA, UNITED STATES
Segall, Anca M., San Diego, CA, UNITED STATES
Klepper, Robert, San Diego, CA, UNITED STATES
PI US 2003166099 A1 20030904
AI US 2002-157305 A1 20020528 (10)
PRAI US 2001-295566P 20010605 (60)
US 2002-359843P 20020225 (60)
DT Utility
FS APPLICATION
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 18580
AB The invention provides compositions and methods for the production of achromosomal and anucleate cells useful for applications such as

L6 ANSWER 3 OF 14 USPATFULL on STN
AN 2003:220740 USPATFULL
TI Methods and compositions for diagnosing and treating rheumatoid

09567863

arthritis
IN Pittman, Debra D., Windham, NH, UNITED STATES
Feldman, Jeffrey L., Arlington, MA, UNITED STATES
Shields, Kathleen M., Harvard, MA, UNITED STATES
Trepicchio, William L., Andover, MA, UNITED STATES
PI US 2003154032 A1 20030814
AI US 2001-23451 A1 20011217 (10)
PRAI US 2000-255861P 20001215 (60)
DT Utility
FS APPLICATION
LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25385
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 14 USPATFULL on STN
AN 2003:119691 USPATFULL
TI Subcellular targeting of therapeutic proteins
IN LeBowitz, Jonathan H., Frontenac, MO, UNITED STATES
Beverley, Stephen M., Clayton, MO, UNITED STATES
PA Symbiontics, Inc. (U.S. corporation)
PI US 2003082176 A1 20030501
AI US 2002-136841 A1 20020430 (10)
PRAI US 2001-287531P 20010430 (60)
US 2001-304609P 20010710 (60)
US 2001-329461P 20011015 (60)
US 2002-351276P 20020123 (60)
DT Utility
FS APPLICATION
LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET, BOSTON, MA, 02110
CLMN Number of Claims: 57
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 1959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Targeted therapeutics that localize to a specific subcellular compartment such as the lysosome are provided. The targeted therapeutics include a therapeutic agent and a targeting moiety that binds a receptor

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

L6 ANSWER 5 OF 14 USPATFULL on STN
AN 2003:93795 USPATFULL
TI Novel human genes and gene expression products I
IN Williams, Lewis T., Mill Valley, CA, UNITED STATES
Escobedo, Jaime, Alamo, CA, UNITED STATES
Innis, Michael A., Moraga, CA, UNITED STATES
Garcia, Pablo Dominguez, San Francisco, CA, UNITED STATES
Sudduth-Klinger, Julie, Kensington, CA, UNITED STATES
Reinhard, Christoph, Alameda, CA, UNITED STATES
Giese, Klause, San Francisco, CA, UNITED STATES
Randazzo, Filippo, Emeryville, CA, UNITED STATES
Kennedy, Giulia C., San Francisco, CA, UNITED STATES
Pot, David, San Francisco, CA, UNITED STATES
Kassam, Atlaf, Oakland, CA, UNITED STATES
Lamson, George, Moraga, CA, UNITED STATES
Drmanac, Radoje, Palo Alto, CA, UNITED STATES
Crkvenjakov, Radomir, Sunnyvale, CA, UNITED STATES
Dickson, Mark, Hollister, CA, UNITED STATES
Drmanac, Snezana, Palo Alto, CA, UNITED STATES
Labat, Ivan, Sunnyvale, CA, UNITED STATES
Leshkowitz, Dena, Sunnyvale, CA, UNITED STATES
Kita, David, Foster City, CA, UNITED STATES
Garcia, Veronica, Sunnyvale, CA, UNITED STATES
Jones, Lee William, Sunnyvale, CA, UNITED STATES
Stache-Crain, Birgit, Sunnyvale, CA, UNITED STATES
PI US 2003065156 A1 20030403
AI US 2002-76555 A1 20020215 (10)
RLI Continuation of Ser. No. US 1998-217471, filed on 21 Dec 1998, PENDING
PRAI US 1997-68755P 19971223 (60)
US 1998-80664P 19980403 (60)
US 1998-105234P 19981021 (60)
DT Utility
FS APPLICATION
LREP BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 15408
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostic and therapeutic agents employing such novel human polymucleotides, their corresponding genes or gene products, e.g., these genes and proteins, including probes, antisense constructs, and antibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 14 USPATFULL on STN
AN 2002:307551 USPATFULL
TI Mannosidase structures
IN Rose, David Richard, Markham, CANADA

US 2000 234879P 2[illegible]
DT Utility
FS APPLICATION

09567863

LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 40572
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a crystal comprising a mannosidase II ligand-binding domain. In particular the present invention relates to a crystal comprising mannosidase II (with and without swainsonine), and its use to generate models for elucidating the structure of other polypeptides and for better identifying ligands capable of modulating mannosidase II activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 14 USPATFULL on STN
AN 2002:243141 USPATFULL
TI METHOD FOR IDENTIFYING PROTEASES, PROTEASE TARGET SITES AND REGULATORS OF PROTEASE ACTIVITY IN CELLS
IN HAY, BRUCE A., PASADENA, CA, UNITED STATES
HAWKINS, CHRISTINE V., PARK ORCHARDS, AUSTRALIA
PA CALIFORNIA INSTITUTE OF TECHNOLOGY (U.S. corporation)
PI US 2002132327 A1 20020919
AI US 1999-270983 A1 19990317 (9)
PRAI US 1998-78721P 19980320 (60)
DT Utility
FS APPLICATION
LREP Lisa A. Haile, ph.D, Gray Cary Ware & Freidenrich LLP, 4365 Executive Drive,, Suite 1100, San Diego, CA, 92121
CLMN Number of Claims: 56
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a fusion protein including a reporter polypeptide linked to a linker polypeptide comprising a protease cleavage site, and a repressor polypeptide that represses the activity of the reporter polypeptide. The repressor polypeptide is operatively linked to the linker polypeptide. Cleavage of the linker polypeptide at the protease cleavage site increases the activity of said reporter. A method is also provided for identifying a protease that recognizes a specific protease cleavage site. The invention further provides a method of identifying a compound that activities a protease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 14 USPATFULL on STN
AN 2002:198679 USPATFULL
TI Thermostable peptidase
IN Cheng, Timothy C., Pasadena, CA, UNITED STATES
Ramakrishnan, Vij, Pasadena, CA, UNITED STATES
Chan, Sunney I., Pasadena, CA, UNITED STATES
PA California Institute of Technology, a California corporation (U.S. corporation)
PI US 2002106779 A1 20020808

DT Utility
FS APPLICATION
LREP SCOTT C. HARRIS, Fish & Richardson P.C., Suite 500, 4350 La Jolla

Village Drive, San Diego, CA, 92122
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 2074
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Thermostable peptidase enzyme derived from archaeon from the genus Pyrococcus is disclosed. The enzyme is produced from native or **recombinant** host cells and can be utilized in the biotechnology industry as a useful enzyme in sequencing reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 14 USPATFULL on STN
AN 2001:163037 USPATFULL
TI Thermostable peptidase
IN Cheng, Timothy C., Pasadena, CA, United States
Ramakrishnan, Vij, Pasadena, CA, United States
Chan, Sunney I., Pasadena, CA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)
PI US 6294367 B1 20010925
AI US 1999-333768 19990615 (9)
PRAI US 1998-89398P 19980615 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Monshipouri, Maryam
LREP Fish & Richardson PC
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 1979
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Thermostable peptidase enzyme derived from archaeon from the genus Pyrococcus is disclosed. The enzyme is produced from native or **recombinant** host cells and can be utilized in the biotechnology industry as a useful enzyme in sequencing reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 14 USPATFULL on STN
AN 1999:132992 USPATFULL
TI Cytotoxic T-lymphocyte antigen as cysteine protease inhibitor
IN Muller, Daniel, Orange, CT, United States
Delaria, Katherine, West Haven, CT, United States
Wallace, Linda, East Haven, CT, United States
Brownell, Elise, Lafayette, CA, United States
PA Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)
PI US 5973110 19991026
WO 9402504 19940203
AI US 1995-373215 19950518 (8)
WO 1993-US6552 19930715
19950518 PCT 371 date
19950518 PCT 102(e) date
EXNAM Primary Examiner: [illegible]; Assistant Examiner: [illegible]
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 7

09567863

ECL Exemplary Claim: 1
DRWN 24 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 969
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are molecules which inhibit the proteolytic activity of cysteine proteases such as Cathepsin H, Cathepsin L and papain, and methods for using molecules which have the biological properties of cytotoxic T-lymphocyte antigen for inhibiting cysteine proteases and inhibiting proteoglycan degradation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 11 OF 14 USPATFULL on STN
AN 1999:121534 USPATFULL
TI Cytotoxic T-lymphocyte antigen as cysteine protease inhibitor
IN Muller, Daniel, Orange, CT, United States
Delaria, Katherine, Wallingford, CT, United States
Wallace, Linda, East Haven, CT, United States
Brownell, Elise, Woodbridge, CT, United States
PA Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)
PI US 5962633 19991005
AI US 1995-485937 19950607 (8)
RLI Division of Ser. No. US 1995-373215, filed on 17 Jan 1995, now abandoned which is a continuation-in-part of Ser. No. US 1992-915923, filed on 17 Jul 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: McGarry, Sean
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 24 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 937
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are molecules which inhibit the proteolytic activity of cysteine proteases such as Cathespin H, Cathespin L and papain, and methods for using molecules which have the biological properties of cytotoxic T-lymphoyte antigen for inhibiting cysteins proteases and inhibiting proteolglycan degradation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 12 OF 14 USPATFULL on STN
AN 1998:108017 USPATFULL
TI Method of using CD24 as a cell marker
IN Humphries, R. Keith, 7625 Borden Street, Vancouver, British Columbia, Canada V5P 3CP
PI US 5804177 19980908
AI US 1997-848252 19970429 (8)
RLI Continuation of Ser. No. US 1995-538052, filed on 2 Oct 1995, now abandoned which is a continuation of Ser. No. US 1993-151672, filed on 15 Nov 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Guzo, David

LN.CNT 1347
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of marking a cell involving introducing into the cell a

nucleotide sequence encoding a cell surface protein and having substantial homology to the nucleotide sequence encoding CD24, and expressing the cell surface protein on the cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 14 USPATFULL on STN
AN 96:51009 USPATFULL
TI DNA encoding polypeptides enabling sorting of proteins to vacuoles in plants
IN Raikhel, Natasha V., Okemos, MI, United States
PA Board of Trustees operating Michigan State University, East Lansing, MI, United States (U.S. corporation)
PI US 5525713 19960611
AI US 1993-173515 19931223 (8)
RLI Continuation-in-part of Ser. No. US 1992-917665, filed on 20 Jul 1992, now patented, Pat. No. US 5276269 which is a continuation-in-part of Ser. No. US 1989 406318, filed on 12 Sep 1989, now abandoned And a continuation-in-part of Ser. No. US 1991-791930, filed on 12 Nov 1991, now patented, Pat. No. US 5360726 which is a continuation-in-part of Ser. No. US 1990-612200, filed on 13 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-406318, filed on 12 Sep 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Mosher, Mary E.
LREP McLeod, Ian C.
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 27 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 1796
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A DNA encoding a polypeptide enabling sorting of proteins to vacuoles in plants, particularly tobacco is described. Without this sequence, the protein is not sorted to the vacuoles. The polypeptide is attached to the C-terminal region of the protein and is particularly useful for sorting of lectins to the vacuole which are insecticidal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 14 OF 14 USPATFULL on STN
AN 94:95340 USPATFULL
TI Polypeptides enabling sorting of proteins to vacuoles in plants
IN Raikhel, Natasha V., Okemos, MI, United States
PA Board of Trustees operating Michigan State University, East Lansing, MI, United States (U.S. corporation)
PI US 5360726 19941101
AI US 1991-791930 19911112 (7)
RLI Continuation-in-part of Ser. No. US 1990-612200, filed on 13 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-406318, filed on 12 Sep 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Benzion, Gary; Assistant Examiner: Mosher, Mary E.
LREP McLeod, Ian C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A polypeptide enabling sorting of proteins to vacuoles in plants, particularly tobacco is described. The polypeptide has the sequence

VFAEAIAANSTLVAE. Without this sequence, the protein is not sorted to the vacuoles. The polypeptide is attached to the C-terminal region of the protein and is particularly useful for sorting of lectins to the vacuole which are insecticidal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d l7 bib abs 1-4

L7 ANSWER 1 OF 4 USPATFULL on STN
AN 2003:238122 USPATFULL
TI Minicell-based transfection
IN Sabbadini, Roger A., Lakeside, CA, UNITED STATES
Berkley, Neil, San Diego, CA, UNITED STATES
PI US 2003166279 A1 20030904
AI US 2002-157391 A1 20020528 (10)
RLI Division of Ser. No. US 2002-154951, filed on 24 May 2002, PENDING
PRAI US 2002-359843P 20020225 (60)
US 2001-293566P 20010524 (60)
DT Utility
FS APPLICATION
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 18548
AB The invention provides compositions and methods for the production of achromosomal and anucleate cells useful for applications such as diagnositic and therapeutic uses, as well as research tools and agents for drug discovery.

L7 ANSWER 2 OF 4 USPATFULL on STN
AN 2003:237942 USPATFULL
TI Minicells comprising membrane proteins
IN Sabbadini, Roger A., Lakeside, CA, UNITED STATES
Surber, Mark W., Coronado, CA, UNITED STATES
Berkley, Neil, San Diego, CA, UNITED STATES
Segall, Anca M., San Diego, CA, UNITED STATES
Klepper, Robert, San Diego, CA, UNITED STATES
PI US 2003166099 A1 20030904
AI US 2002-157305 A1 20020528 (10)
PRAI US 2001-295566P 20010605 (60)
US 2002-359843P 20020225 (60)
DT Utility
FS APPLICATION
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 18580
AB The invention provides compositions and methods for the production of achromosomal and anucleate cells useful for applications such as diagnositic and therapeutic uses, as well as research tools and agents for drug discovery.

L7 ANSWER 3 OF 4 USPATFULL on STN
AN 96:51009 USPATFULL

[illegible]
PI US 5525713 19960611
AI US 1993-173515 19931223 (8)

09567863

RLI Continuation-in-part of Ser. No. US 1992-917665, filed on 20 Jul 1992, now patented, Pat. No. US 5276269 which is a continuation-in-part of Ser. No. US 1989-406318, filed on 12 Sep 1989, now abandoned And a continuation-in-part of Ser. No. US 1991-791930, filed on 12 Nov 1991, now patented, Pat. No. US 5360726 which is a continuation-in-part of Ser. No. US 1990-612200, filed on 13 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-406318, filed on 12 Sep 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Mosher, Mary E.
LREP McLeod, Ian C.
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 27 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 1796
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A DNA encoding a polypeptide enabling sorting of proteins to vacuoles in plants, particularly tobacco is described. Without this sequence, the protein is not sorted to the vacuoles. The polypeptide is attached to the C-terminal region of the protein and is particularly useful for sorting of lectins to the vacuole which are insecticidal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 4 USPATFULL on STN
AN 94:95340 USPATFULL
TI Polypeptides enabling sorting of proteins to vacuoles in plants
IN Raikhel, Natasha V., Okemos, MI, United States
PA Board of Trustees operating Michigan State University, East Lansing, MI, United States (U.S. corporation)
PI US 5360726 19941101
AI US 1991-791930 19911112 (7)
RLI Continuation-in-part of Ser. No. US 1990-612200, filed on 13 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-406318, filed on 12 Sep 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Benzion, Gary; Assistant Examiner: Mosher, Mary E.
LREP McLeod, Ian C.
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 1677
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A polypeptide enabling sorting of proteins to vacuoles in plants, particularly tobacco is described. The polypeptide has the sequence VFAEAIAANSTLVAE. Without this sequence, the protein is not sorted to the vacuoles. The polypeptide is attached to the C-terminal region of the protein and is particularly useful for sorting of lectins to the vacuole which are insecticidal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

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=> s lysosomal enzyme and plant
L8          195 LYSOSOMAL ENZYME AND PLANT

=> s l8 and promoter
L9          105 L8 AND PROMOTER

=> s l9 and plant cell
L10          37 L9 AND PLANT CELL

=>  s l10 and construct
L11          37 L10 AND CONSTRUCT

=> s l11 and regulat? expression
L12          15 L11 AND REGULAT? EXPRESSION

=> dup rem l12
PROCESSING COMPLETED FOR L12
L13          15 DUP REM L12 (0 DUPLICATES REMOVED)

=> d l13 bib abs 1-15

L13  ANSWER 1 OF 15  USPATFULL on STN
AN      2003:237867  USPATFULL
TI      Human G-protein chemokine receptor (CCR5) HDGNR10
IN      Rosen, Craig A., Laytonsville, MD, UNITED STATES
        Roschke, Viktor, Rockville, MD, UNITED STATES
        Li, Yi, Sunnyvale, CA, UNITED STATES
        Ruben, Steven M., Olney, MD, UNITED STATES
PA      Human Genome Sciences, Inc. (U.S. corporation)
PI      US 2003166024      A1   20030904
AI      US 2002-135839     A1   20020501 (10)
RLI     Continuation of Ser. No. US 2001-779879, filed on 9 Feb 2001, ABANDONED
PRAI    US 2000-181258P     20000209 (60)
        US 2000-187999P     20000309 (60)
        US 2000-234336P     20000922 (60)
DT      Utility
FS      APPLICATION
LREP    STEPNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 NEW YORK AVENUE, N.W.,
        SUITE 600, WASHINGTON, DC, 20005-3934
CLMN    Number of Claims: 61
ECL     Exemplary Claim: 1
DRWN    4 Drawing Page(s)
LN.CNT 17941
AB      The present invention relates to a novel human protein called Human
        G-protein Chemokine Receptor (CCR5) HDGNR10, and isolated
        polynucleotides encoding this protein. The invention is also directed to
        human antibodies that bind Human G-protein Chemokine Receptor (CCR5)
        HDGNR10 and to polynucleotides encoding those antibodies. Also provided
        are vectors, host cells, antibodies, and recombinant methods for
        producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human
        anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10 antibodies. The
        invention further relates to diagnostic and therapeutic methods useful
        for diagnosing and treating diseases, disorders, and/or conditions

AN      [illegible]  USPATFULL
TI      Methods of treating or preventing cell, tissue, and organ damage using
        human myeloid progenitor inhibitory factor-1 (MPIF-1)
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09567863

IN Li, Haodong, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Grzegorzewski, Krzysztof J., Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Patel, Vikram, Germantown, MD, UNITED STATES
Gentz, Reinder L., Rockville, MD, UNITED STATES
PA Human Genome Sciences, Inc. (U.S. corporation)
PI US 2003114379 A1 20030619
AI US 2002-261950 A1 20021002 (10)
RLI Division of Ser. No. US 2000-689693, filed on 13 Oct 2000, GRANTED, Pat. No. US 6495129 Division of Ser. No. US 2000-571013, filed on 15 May 2000, PENDING Division of Ser. No. US 1999-334951, filed on 17 Jun 1999, GRANTED, Pat. No. US 6451562 Continuation of Ser. No. US 1996-722723, filed on 30 Sep 1996, ABANDONED Continuation of Ser. No. US 1996-722719, filed on 30 Sep 1996, GRANTED, Pat. No. US 6001606 Continuation-in-part of Ser. No. US 1995-465682, filed on 6 Jun 1995, ABANDONED Continuation-in-part of Ser. No. US 1995-446881, filed on 5 May 1995, ABANDONED Continuation of Ser. No. US 1994-208339, filed on 8 Mar 1994, GRANTED, Pat. No. US 5504003
PRAI US 1999-159362P 19991011 (60)
US 1999-164059P 19991108 (60)
US 1999-172063P 19991223 (60)
US 2000-189048P 20000314 (60)
US 2000-199142P 20000424 (60)
US 2000-211458P 20000613 (60)
US 2000-212658P 20000619 (60)
US 1996-27299P 19960930 (60)
US 1996-27300P 19960930 (60)
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 73 Drawing Page(s)
LN.CNT 14465
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There are disclosed therapeutic compositions and methods using isolated nucleic acid molecules encoding a human myeloid progenitor inhibitory factor-1 (MPIF-1) polypeptide (previously termed MIP-3 and chemokine .beta.8 (CK.beta.8 or ckb-8)), as well as MPIF-1 polypeptide itself, as are vectors, host cells and recombinant methods for producing the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 15 USPATFULL on STN
AN 2003:154427 USPATFULL
TI Production of lysosomal enzymes in plants by transient expression
IN Garger, Stephen J., Vacaville, CA, UNITED STATES
Turpen, Thomas H., Vacaville, CA, UNITED STATES
Kumagai, Monto H., Davis, CA, UNITED STATES
PI US 2003106095 A1 20030605
AI US 2002-103327 A1 20020320 (10)
RLI Continuation of Ser. No. US 2001-993059, filed on 13 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2000-626127, filed on 26 Jul 2000

WASHINGTON, DC, 20004
CLMN Number of Claims: 18
ECL Exemplary Claim: 1

09567863

DRWN 18 Drawing Page(s)
LN.CNT 5118
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to .alpha.-galactosidase truncated at the carboxy terminus and the production of enzymatically active recombinant human and animal lysosomal enzymes involving construction and expression of recombinant expression constructs comprising coding sequences of human or animal lysosomal enzymes in a **plant** expression system. The **plant** expression system provides for post-translational modification and processing to produce a recombinant gene product exhibiting enzymatic activity. The invention is demonstrated by working examples in which transgenic tobacco plants express recombinant expression constructs comprising human glucocerebrosidase nucleotide sequences. The invention is also demonstrated by working examples in which transfected tobacco plants express recombinant viral expression constructs comprising human .alpha. galactosidase nucleotide sequences. The recombinant lysosomal enzymes produced in accordance with the invention may be used for a variety of purposes, including but not limited to enzyme replacement therapy for the therapeutic treatment of human and animal lysosomal storage diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 15 USPATFULL on STN
AN 2003:146312 USPATFULL
TI Human G-protein Chemokine Receptor (CCR5) HDGNR10
IN Roschke, Viktor, Rockville, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PA Human Genome Sciences, Inc. (U.S. corporation)
PI US 2003100058 A1 20030529
AI US 2002-67800 A1 20020208 (10)
RLI Continuation-in-part of Ser. No. WO 2001-US4153, filed on 9 Feb 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-779880, filed on 9 Feb 2001, PENDING
PRAI US 2001-297257P 20010612 (60)
US 2001-310458P 20010808 (60)
US 2001-328447P 20011012 (60)
US 2001-341725P 20011221 (60)
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
CLMN Number of Claims: 60
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 18955
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel human protein called Human G-protein Chemokine Receptor (CCR5) HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed to human antibodies that bind Human G-protein Chemokine Receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

L13 ANSWER 5 OF 15 USPATFULL on STN
AN 2003:71949 USPATFULL
TI Compounds that enhance tumor death
IN Dawson, Glyn, Chicago, IL, UNITED STATES
Cho, Seongeun Julia, Hillsborough, NJ, UNITED STATES
PA The University of Chicago (U.S. corporation)
PI US 2003050236 A1 20030313
AI US 2001-930559 A1 20010815 (9)
PRAI US 2000-225526P 20000815 (60)
DT Utility
FS APPLICATION
LREP Gina N. Shishima, FULBRIGHT & JAWORSKI L.L.P., SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701
CLMN Number of Claims: 57
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 6478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention concerns compositions that modulate palmitoyl protein thioesterase 1 (PPT1) activity, as well as methods for using these compositions as a therapeutic treatment to inhibit a cancer cell, such as by promoting apoptosis of the cancer cell. It is contemplated that these compositions may be used in conjunction with other anti-cancer therapies such as chemotherapeutic agents. PPT1 modulators include polypeptide and peptides that competitively interact with PPT1, as well as PPT1 antisense and ribozyme constructs that prevent the expression of PPT1. Furthermore, the present invention also covers methods of screening for PPT1 modulators, as well as for levels of PPT1 amount or activity as a diagnostic tool.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 15 USPATFULL on STN
AN 2003:57079 USPATFULL
TI Synthetic mammalian alpha-N-acetylglucosaminidase and genetic sequences encoding same
IN Hopwood, John Joseph, Stonyfell, AUSTRALIA
Scott, Hamish Steele, Geneve, SWITZERLAND
Weber, Birgit, Hackney, AUSTRALIA
Blanch, Lianne, Grange, AUSTRALIA
Anson, Donald Stewart, Thebarton, AUSTRALIA
PI US 2003039643 A1 20030227
AI US 2001-836613 A1 20010417 (9)
RLI Division of Ser. No. US 1999-77354, filed on 22 Apr 1999, GRANTED, Pat. No. US 6255096 A 371 of International Ser. No. WO 1996-US747, filed on 22 Nov 1996, UNKNOWN
PRAI AU 1995-6748 19951123
DT Utility
FS APPLICATION
LREP ANN R. POKALSKY, ESQ., DILWORTH & BARRESE, 333 EARLE OVINGTON BLVD., UNIONDALE, NY, 11553
CLMN Number of Claims: 110
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 9333

over an input data line. A register [illegible] is provided for latching the divided input data word from the divider [illegible]. The divided input data word is added within a summer (112) to a latched divided data word from

the register, thereby forming a summed data word. A multiplexer (116) produces an interpolated output by multiplexing the summed data word with an input data word. In a preferred implementation, the register (108) is latched at a first clock rate, and the multiplexer (116) is clocked at twice the first clock rate. The efficient filter architecture allows interpolation to be performed in the absence of multipliers, and in a manner using filter coefficients equivalent to powers of two. This enables the interpolator (100) to be realized inexpensively, and renders the filter particularly suitable for implementation within integrated circuits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 15 USPATFULL on STN
AN 2003:30367 USPATFULL
TI Human chemokine beta-10 mutant polypeptides
IN Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Li, Haodong, Gaithersburg, MD, UNITED STATES
Adams, Mark D., Rockville, MD, UNITED STATES
Gentz, Solange H. L., Rockville, MD, UNITED STATES
Alderson, Ralph, Gaithersburg, MD, UNITED STATES
Li, Yuling, Germantown, MD, UNITED STATES
Parmelee, David, Rockville, MD, UNITED STATES
White, John R., Coatesville, PA, UNITED STATES
Appelbaum, Edward R., Blue Bell, PA, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2003022314 A1 20030130
AI US 2002-125451 A1 20020419 (10)
RLI Division of Ser. No. US 2000-479729, filed on 7 Jan 2000, GRANTED, Pat. No. US 6391589 Division of Ser. No. US 1996-613822, filed on 23 Feb 1996, GRANTED, Pat. No. US 6174995 Division of Ser. No. US 1999-261201, filed on 3 Mar 1999, PENDING Division of Ser. No. US 1995-458355, filed on 2 Jun 1995, GRANTED, Pat. No. US 5981230 Continuation-in-part of Ser. No. US 1995-458355, filed on 2 Jun 1995, GRANTED, Pat. No. US 5981230 Continuation-in-part of Ser. No. WO 1994-US9484, filed on 23 Aug 1994, UNKNOWN Continuation-in-part of Ser. No. WO 1994-US9484, filed on 23 Aug 1994, UNKNOWN
PRAI US 1999-115439P 19990108 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 12136
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human chemokine Beta-10 polypeptides and DNA (RNA) encoding such chemokine polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such chemokine polypeptides for the treatment of leukemia, tumors, chronic infections, autoimmune disease, fibrotic disorders, wound healing and psoriasis. Antagonists against such chemokine polypeptides and their use as a therapeutic to treat rheumatoid arthritis, autoimmune and chronic inflammatory and infective diseases

L13 ANSWER 8 OF 15 USPATFULL on STN
AN 2002:166388 USPATFULL

09567863

TI Production of lysosomal enzymes in plants by transient expression
IN Garger, Stephen J., Vacaville, CA, UNITED STATES
Turpen, Thomas H., Vacaville, CA, UNITED STATES
Kumagai, Monto H., Davis, CA, UNITED STATES
PI US 2002088024 A1 20020704
AI US 2001-993059 A1 20011113 (9)
RLI Continuation-in-part of Ser. No. US 2000-626127, filed on 26 Jul 2000, PENDING
DT Utility
FS APPLICATION
LREP HOWREY SIMON ARNOLD & WHITE LLP, BOX 34, 1299 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 5012
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to -galactosidase truncated at the carboxy terminus and the production of enzymatically active recombinant human and animal lysosomal enzymes involving construction and expression of recombinant expression constructs comprising coding sequences of human or animal lysosomal enzymes in a **plant** expression system. The **plant** expression system provides for post-translational modification and processing to produce a recombinant gene product exhibiting enzymatic activity. The invention is demonstrated by working examples in which transgenic tobacco plants express recombinant expression constructs comprising human glucocerebrosidase nucleotide sequences. The invention is also demonstrated by working examples in which transfected tobacco plants express recombinant viral expression constructs comprising human .alpha. galactosidase nucleotide sequences. The recombinant lysosomal enzymes produced in accordance with the invention may be used for a variety of purposes, including but not limited to enzyme replacement therapy for the therapeutic treatment of human and animal lysosomal storage diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 9 OF 15 USPATFULL on STN
AN 2002:119846 USPATFULL
TI Human G-protein Chemokine receptor (CCR5) HDGNR10
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Roschke, Viktor, Rockville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002061834 A1 20020523
AI US 2001-779880 A1 20010209 (9)
PRAI US 2000-181258P 20000209 (60)
US 2000-187999P 20000309 (60)
US 2000-234336P 20000922 (60)
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
CLMN Number of Claims: 61
ECL Exemplary Claim: 1

G protein Chemokine Receptor CCR5 HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed t human antibodies that bind Human G-protein Chemokine Receptor (CCR5)

HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this novel human protein and these novel human antibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 10 OF 15 USPATFULL on STN
AN 2002:92268 USPATFULL
TI Human G-protein Chemokine Receptor HDGNR10
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Roschke, Viktor, Rockville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002048786 A1 20020425
AI US 2001-779879 A1 20010209 (9)
PRAI US 2000-181258P 20000209 (60)
US 2000-187999P 20000309 (60)
US 2000-234336P 20000922 (60)
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
CLMN Number of Claims: 61
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 17969
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel human protein called Human G-protein Chemokine Receptor (CCR5) HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed to human antibodies that bind Human G-protein Chemokine Receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this novel human protein and these novel human antibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 11 OF 15 USPATFULL on STN
AN 2002:332463 USPATFULL
TI Methods of inhibiting hematopoietic stem cells using human myeloid progenitor inhibitory factor-1 (MPIF-1) (Ckbeta-8/MIP-3)
IN Li, Haodong, Gaithersburg, MD, United States
Ruben, Steven M., Olney, MD, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
PI US 6495129 B1 20021217
AI US 2000-689693 20001013 (9)

Sep 1995, now abandoned Continuation in part of Ser. No. [illegible], filed on 30 Sep 1996, now patented, Pat. No. US 6001606
Continuation in part of Ser. No. US 1995-468775, filed on 6 Jun 1995,

now abandoned Continuation-in-part of Ser. No. US 1995-465682, filed on 6 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1995-446881, filed on 5 May 1995, now abandoned Continuation-in-part of Ser. No. US 468775 Continuation-in-part of Ser. No. US 465682 Continuation-in-part of Ser. No. US 446881 Continuation of Ser. No. US 446881 Continuation-in-part of Ser. No. US 1994-208339, filed on 8 Mar 1994, now patented, Pat. No. US 5504003 Continuation of Ser. No. US 446881 Continuation-in-part of Ser. No. US 208339 Continuation-in-part of Ser. No. US 208339

PRAI US 2000-212658P 20000619 (60)
US 2000-211458P 20000613 (60)
US 2000-199142P 20000424 (60)
US 2000-189048P 20000314 (60)
US 1999-172063P 19991223 (60)
US 1999-164059P 19991108 (60)
US 1999-159362P 19991014 (60)

DT Utility
FS GRANTED
EXNAM Primary Examiner: Mertz, Prema
LREP Sterne, Kessler, Goldstein & Fox, P.L.L.C.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 102 Drawing Figure(s); 73 Drawing Page(s)
LN.CNT 14198
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There are disclosed therapeutic compositions and methods using isolated nucleic acid molecules encoding a human myeloid progenitor inhibitory factor-1 (MPIF-1) polypeptide (previously termed MIP-3 and chemokine .beta.8 (CK.beta.8 or ckb-8)), as well as MPIF-1 polypeptide itself, as are vectors, host cells and recombinant methods for producing the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 12 OF 15 USPATFULL on STN
AN 2002:116027 USPATFULL
TI Human chemokine beta-10 mutant polypeptides
IN Olsen, Henrik S., Gaithersburg, MD, United States
Li, Haodong, Gaithersburg, MD, United States
Adams, Mark D., North Potomac, MD, United States
Gentz, Solange H. L., Rockville, MD, United States
Alderson, Ralph, Gaithersburg, MD, United States
Li, Yuling, Germantown, MD, United States
Parmelee, David, Rockville, MD, United States
White, John R., Coatsville, PA, United States
Appelbaum, Edward R., Blue Bell, PA, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
SmithKline Beecham, Corp., King of Prussia, PA, United States (U.S. corporation)
PI US 6391589 B1 20020521
AI US 2000-479729 20000107 (9)
RLI Continuation-in-part of Ser. No. US 1995-462967, filed on 5 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1995-458355, filed on 2 Jun 1995, now patented, Pat. No. US 5981230 Continuation-in-part of Ser. No. US 1994-358184, filed on 23 Aug 1994

LREP Human Genome Sciences, Inc.
CLMN Number of Claims: 50
ECL Exemplary Claim: 1

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DRWN 21 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 11904
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human chemokine Beta-10 polypeptides and DNA (RNA) encoding such chemokine polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such chemokine polypeptides for the treatment of leukemia, tumors, chronic infections, autoimmune disease, fibrotic disorders, wound healing and psoriasis. Antagonists against such chemokine polypeptides and their use as a therapeutic to treat rheumatoid arthritis, autoimmune and chronic inflammatory and infective diseases, allergic reactions, prostaglandin-independent fever and bone marrow failure are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 13 OF 15 USPATFULL on STN
AN 2001:102606 USPATFULL
TI Synthetic mammalian .alpha.-n-acetylglucosaminidase and genetic sequences encoding same
IN Hopwood, John Joseph, Stonyfell, Australia
Scott, Hamish Steele, Geneva, Switzerland
Weber, Birgit, Hackney, Australia
Blanch, Lianne, Grange, Australia
Anson, Donald Stewart, Thebarton, Australia
PA Women's and Children's Hospital, Australia (non-U.S. corporation)
PI US 6255096 B1 20010703
WO 9719177 19970529
AI US 1999-77354 19990422 (9)
WO 1996-AU747 19961122
19990422 PCT 371 date
19990422 PCT 102(e) date
PRAI AU 1995-6748 19951123
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Rao, Manjunath
LREP Pokalsky, Ann R.
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1469
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to mammalian .alpha.-N-acetyglucosaminidase and to genetic sequences encoding same and to their use in the investigation, diagnosis and treatment of subjects suspected of or suffering from .alpha.-N-acetylglucosaminidase deficiency.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 14 OF 15 USPATFULL on STN
AN 1999:85655 USPATFULL
TI Production of lysosomal enzymes in **plant**-based expression systems
IN [illegible], Blacksburg, VA, United States
Virginia Tech Intellectual Properties, Inc., United States U.S. corporation
PI US 5929304 19990727

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AI US 1996-713928 19960913 (8)
PRAI US 1995-3737P 19950914 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Kemmerer, Elizabeth
LREP Pennie & Edmonds LLP
CLMN Number of Claims: 73
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 29 Drawing Page(s)
LN.CNT 2625
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to the production of enzymatically active recombinant human and animal lysosomal enzymes involving construction and expression of recombinant expression constructs comprising coding sequences of human or animal lysosomal enzymes in a **plant** expression system. The **plant** expression system provides for post-translational modification and processing to produce a recombinant gene product exhibiting enzymatic activity. The invention is demonstrated by working examples in which transgenic tobacco plants having recombinant expression constructs comprising human hGC and IDUA nucleotide sequences produced enzymatically active modified human glucocerebrosidase and human .alpha.-L-iduronidase. The recombinant lysosomal enzymes produced in accordance with the invention may be used for a variety of purposes, including but not limited to enzyme replacement therapy for the therapeutic treatment of human and animal lysosomal storage diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 15 OF 15 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1997-202248 [18] WPIDS
DNN N1997-167118 DNC C1997-064741
TI Production of enzymatically active (modified) **lysosomal enzyme** in transgenic plants - useful in treatment of lysosomal storage disorders.
DC B04 C06 D16 P13
IN CRAMER, C L; OISHI, K K; RADIN, D N; WEISSENBORN, D L
PA (CROP-N) CROPTECH DEV CORP; (VIRG) VIRGINIA TECH INTELLECTUAL PTY INC; (VIPG) VIRGINIA TECH INTELLECTUAL PROPERTIES
CYC 75
PI WO 9710353 A1 19970320 (199718)* EN 111p
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AU AZ BA BB BG BR BY CA CN CU CZ EE FI GE HU IL IS JP KG KP KR KZ LC LK LR LS LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TR TT UA UZ VN
AU 9670711 A 19970401 (199730)
EP 865499 A1 19980923 (199842) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
US 5929304 A 19990727 (199936)
ADT WO 9710353 A1 WO 1996-US14730 19960913; AU 9670711 A AU 1996-70711 19960913; EP 865499 A1 EP 1996-931569 19960913, WO 1996-US14730 19960913; US 5929304 A Provisional US 1995-3737P 19950914, US 1996-713928 19960913
FDT AU 9670711 A Based on WO 9710353; EP 865499 A1 Based on WO 9710353
PRAI US 1995-3737P 19950914; US 1996-713928 19960913

enzyme ysosomal enzyme
A transgenic **plant**, comprises: a growing the transgenic **plant** which has a recombinant expression **construct** comprising a nucleotide sequence encoding (A) or (B) and a

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promoter (preferably inducible **promoter**) that **regulates expression** of the nucleotide sequences so that (A) or (B) is expressed in the transgenic **plant**; and (b) recovering (A) or (B) from an organ of the transgenic **plant**; where (B) has the amino acid sequence of (A) with one or several amino acid substitutions, additions and/or deletions, and the organ is a leaf, stem, root, flower, fruit or seed. Also claimed are: (1) a recombinant expression **construct** (I) comprising a nucleotide sequence as above encoding (A) or (B); (2) a **plant** transformation vector comprising (I); (3) a **plant cell**, tissue or organ which has the recombinant expression vector of (2); (4) a transgenic **plant** or **plant cell** capable of producing (A) or (B) which contains a recombinant expression **construct** as in (1); and (5) (A) or (B) produced by growing a transgenic **plant** as in (4) and recovering the enzyme from an organ of the transgenic **plant** as above.

USE - The **plant** expression system provides for post-translational modification and processing to produce a recombinant gene product ((A) or (B)) exhibiting enzymatic activity. (A) and (B) are useful for enzyme replacement therapy for therapeutic treatment of human and animal lysosomal storage diseases, e.g. Fabry, Farber and Gaucher diseases and Tay-Sachs, and industrial processes involving enzymatic substrate hydrolysis.

Dwg.0/21

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=>
=>
=>
=> s plant cell and lysosomal enzyme
L14          40 PLANT CELL AND LYSOSOMAL ENZYME

=> s l14 and expression construct
L15          14 L14 AND EXPRESSION CONSTRUCT

=> d his

     (FILE 'HOME' ENTERED AT 15:34:45 ON 09 SEP 2003)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:35:13 ON
     09 SEP 2003
L1            8 S MAMMALIAN LYSOSOMAL ENZYME
L2            4 DUP REM L1 (4 DUPLICATES REMOVED)
L3          136 S MAMMALIAN LYSOSOMAL?
L4           20 S L3 AND PLANT
L5           20 DUP REM L4 (0 DUPLICATES REMOVED)
L6           14 S L5 AND RECOMBINANT
L7            4 S L3 AND PLANT CELL
L8          195 S LYSOSOMAL ENZYME AND PLANT
L9          105 S L8 AND PROMOTER
L10          37 S L9 AND PLANT CELL
L11          37 S L10 AND CONSTRUCT
L12          15 S L11 AND REGULAT? EXPRESSION
L13          15 DUP REM L12 (0 DUPLICATES REMOVED)
L14          40 S PLANT CELL AND LYSOSOMAL ENZYME

=> d l14 bib abs 1-3
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L16 ANSWER 1 OF 3 USPATFULL on STN
AN 2003:206834 USPATFULL
TI Chemokine beta-1 fusion proteins
IN Bell, Adam, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2003143191 A1 20030731
AI US 2002-153604 A1 20020524 (10)
PRAI US 2001-293212P 20010525 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 15446
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel chemokine polypeptides and encoding nucleic acids. More specifically, therapeutic compositions and methods are provided using isolated nucleic acid molecules encoding a human chemokine beta-1 (Ck.beta.-1 or Ckb1) polypeptide (previously termed monocyte-colony inhibitory factor (M-CIF), MIP1-.gamma., and Hemofiltrate CC chemokine-1 (HCC-1)), and Ckb1 polypeptides themselves, as are vectors, host cells and recombinant methods for producing the same. Also provided are methods of treating, preventing, ameliorating diseases using such compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 3 USPATFULL on STN
AN 96:111347 USPATFULL
TI Cloning and expression of biologically active .alpha.-galactosidase A as a fusion protein
IN Desnick, Robert J., New York, NY, United States
Bishop, David F., New York, NY, United States
Ioannou, Yiannis A., New York, NY, United States
PA The Mount Sinai School of Medicine of the City University of New York, New York, NY, United States (U.S. corporation)
PI US 5580757 19961203
AI US 1994-261577 19940617 (8)
RLI Division of Ser. No. US 1992-983451, filed on 30 Nov 1992, now patented, Pat. No. US 5401650 which is a continuation-in-part of Ser. No. US 1990-602824, filed on 24 Oct 1990, now patented, Pat. No. US 5356804 And Ser. No. US 1990-602608, filed on 24 Oct 1990, now patented, Pat. No. US 5382524
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Hendricks, Keith D.
LREP Pennie & Edmonds
CLMN Number of Claims: 15
ECL Exemplary Claim: 5
DRWN 51 Drawing Figure(s); 38 Drawing Page(s)
LN.CNT 3138
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention involves the production of large quantities of

post-translational modifications required for proper processing, e.g. glycosylation, phosphorylation, etc. and sorting of the expression product so that an active enzyme is produced. In addition, the

expression of fusion proteins which simplify purification is described.

Using the methods described herein, the recombinant .alpha.-Gal A is secreted by the engineered host cells so that it is recovered from the culture medium in good yield. The .alpha.-Gal A produced in accordance with the invention may be used, but is not limited to, in the treatment in Fabry Disease; for the hydrolysis of .alpha.-galactosyl residues in glycoconjugates; and/or for the conversion of the blood group B antigen on erythrocytes to the blood group O antigen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 3 OF 3 USPATFULL on STN
AN 95:27218 USPATFULL
TI Cloning and expression of biologically active .alpha.-galactosidase A
IN Desnick, Robert J., New York, NY, United States
Bishop, David F., New York, NY, United States
Ioannou, Yiannis A., New York, NY, United States
PA The Mount Sinai School of Medicine of the City University of New York, New York, NY, United States (U.S. corporation)
PI US 5401650 19950328
AI US 1992-983451 19921130 (7)
RLI Continuation-in-part of Ser. No. US 1990-602824, filed on 24 Oct 1990 And Ser. No. US 1990-602608, filed on 24 Oct 1990
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Hendricks, Keith D.
LREP Pennie & Edmonds
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 51 Drawing Figure(s); 38 Drawing Page(s)
LN.CNT 3083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention involves the production of large quantities of human .alpha.-Gal A by cloning and expressing the .alpha.-Gal A coding sequence in eukaryotic host cell expression systems. The eukaryotic expression systems, and in particular the mammalian host cell expression system described herein provide for the appropriate cotranslational and posttranslational modifications required for proper processing, e.g., glycosylation, phosphorylation, etc. and sorting of the expression product so that an active enzyme is produced. In addition, the expression of fusion proteins which simplify purification is described.

Using the methods described herein, the recombinant .alpha.-Gal A is secreted by the engineered host cells so that it is recovered from the culture medium in good yield. The .alpha.-Gal A produced in accordance with the invention may be used, but is not limited to, in the treatment in Fabry Disease; for the hydrolysis of .alpha.-galactosyl residues in glycoconjugates; and/or for the conversion of the blood group B antigen on erythrocytes to the blood group O antigen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> s l16 and mammalian
L17 3 L16 AND MAMMALIAN

=> d l17 bib abs 1-3

L17 ANSWER 1 OF 3 USPATFULL on STN
AN 2003:206834 USPATFULL
TI Chemokine beta-1 fusion proteins
IN Bell, Adam, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2003143191 A1 20030731
AI US 2002-153604 A1 20020524 (10)
PRAI US 2001-293212P 20010525 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 15446
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel chemokine polypeptides and encoding nucleic acids. More specifically, therapeutic compositions and methods are provided using isolated nucleic acid molecules encoding a human chemokine beta-1 (Ck.beta.-1 or Ckb1) polypeptide (previously termed monocyte-colony inhibitory factor (M-CIF), MIP1-.gamma., and Hemofiltrate CC chemokine-1 (HCC-1)), and Ckb1 polypeptides themselves, as are vectors, host cells and recombinant methods for producing the same. Also provided are methods of treating, preventing, ameliorating diseases using such compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 3 USPATFULL on STN
AN 96:111347 USPATFULL
TI Cloning and expression of biologically active .alpha.-galactosidase A as a fusion protein
IN Desnick, Robert J., New York, NY, United States
Bishop, David F., New York, NY, United States
Ioannou, Yiannis A., New York, NY, United States
PA The Mount Sinai School of Medicine of the City University of New York, New York, NY, United States (U.S. corporation)
PI US 5580757 19961203
AI US 1994-261577 19940617 (8)
RLI Division of Ser. No. US 1992-983451, filed on 30 Nov 1992, now patented, Pat. No. US 5401650 which is a continuation-in-part of Ser. No. US 1990-602824, filed on 24 Oct 1990, now patented, Pat. No. US 5356804 And Ser. No. US 1990-602608, filed on 24 Oct 1990, now patented, Pat. No. US 5382524
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Hendricks, Keith D.
LREP Dennis, Edmonds

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention involves the production of large quantities of human .alpha. Gal A by cloning and expressing the .alpha. Gal A coding

sequence in eukaryotic host cell expression systems. The eukaryotic expression systems, and in particular the **mammalian** host cell expression system described herein provide for the appropriate cotranslational and posttranslational modifications required for proper processing, e.g., glycosylation, phosphorylation, etc. and sorting of the expression product so that an active enzyme is produced. In addition, the expression of fusion proteins which simplify purification is described.

Using the methods described herein, the recombinant .alpha.-Gal A is secreted by the engineered host cells so that it is recovered from the culture medium in good yield. The .alpha.-Gal A produced in accordance with the invention may be used, but is not limited to, in the treatment in Fabry Disease; for the hydrolysis of .alpha.-galactosyl residues in glycoconjugates; and/or for the conversion of the blood group B antigen on erythrocytes to the blood group O antigen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 3 USPATFULL on STN
AN 95:27218 USPATFULL
TI Cloning and expression of biologically active .alpha.-galactosidase A
IN Desnick, Robert J., New York, NY, United States
Bishop, David F., New York, NY, United States
Ioannou, Yiannis A., New York, NY, United States
PA The Mount Sinai School of Medicine of the City University of New York, New York, NY, United States (U.S. corporation)
PI US 5401650 19950328
AI US 1992-983451 19921130 (7)
RLI Continuation-in-part of Ser. No. US 1990-602824, filed on 24 Oct 1990 And Ser. No. US 1990-602608, filed on 24 Oct 1990
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Hendricks, Keith D.
LREP Pennie & Edmonds
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 51 Drawing Figure(s); 38 Drawing Page(s)
LN.CNT 3083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention involves the production of large quantities of human .alpha.-Gal A by cloning and expressing the .alpha.-Gal A coding sequence in eukaryotic host cell expression systems. The eukaryotic expression systems, and in particular the **mammalian** host cell expression system described herein provide for the appropriate cotranslational and posttranslational modifications required for proper processing, e.g., glycosylation, phosphorylation, etc. and sorting of the expression product so that an active enzyme is produced. In addition, the expression of fusion proteins which simplify purification is described.

Using the methods described herein, the recombinant .alpha.-Gal A is secreted by the engineered host cells so that it is recovered from the culture medium in good yield. The .alpha.-Gal A produced in accordance

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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